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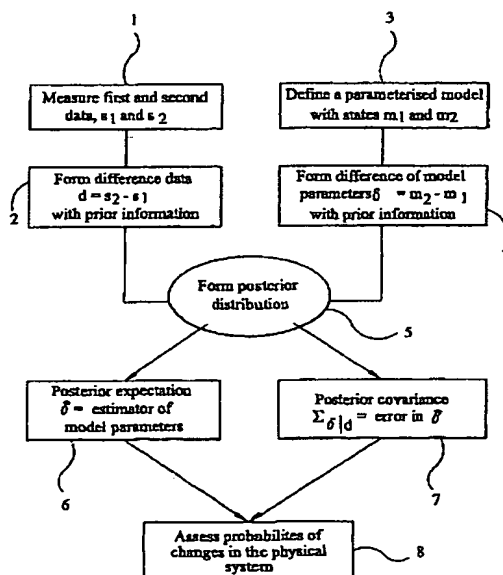
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(54) Title: **PROCESSING SEISMIC DATA REPRESENTING A PHYSICAL SYSTEM**



(57) Abstract: Processing seismic data representing a physical system A method is provided for processing seismic data representing a physical system, such as seismic reflection data representing a region of the Earth. The method forms a difference (2) between first and second measured data (1) representing the system in first and second states, respectively, for example at different times. The difference is inverted (5) in accordance with a parameterised model (3, 4) of the physical system to obtain changes (6, 7) in the parameters of the model.



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